

Manulife

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Engagement Team:

Taylor Whitfield, taylor.whitfield@sustainalytics.com, (+1) 416 861 0430

Graeme Sutherland, graeme.sutherland@sustainalytics.com

Introduction

In 2022, Manulife issued a green bond (the “2022 Green Bond”) aimed at financing activities that promote a low-carbon, climate-resilient future. In February 2023, Manulife engaged Sustainalytics to review the projects funded through the issued 2022 Green Bond and provide an assessment as to whether the projects met the use of proceeds criteria and the reporting commitments outlined in the Manulife Sustainable Bond Framework (the “Framework”).¹ Sustainalytics provided a Second-Party Opinion on the Framework in February 2022.²

Evaluation Criteria

Sustainalytics evaluated the projects and assets funded with proceeds from the 2022 Green Bond based on whether the projects and programmes:

1. Met the use of proceeds and eligibility criteria outlined in the Framework; and
2. Reported on at least one of the key performance indicators (KPIs) for each use of proceeds category outlined in the Framework.

Table 1: Use of Proceeds Category, Eligibility Criteria and Associated KPIs

Use of Proceeds Category	Eligibility Criteria	Key Performance Indicators
Renewable Energy	<p>Development, construction, operation, maintenance, and upgrades of:</p> <ol style="list-style-type: none"> i. facilities and equipment wholly dedicated to the generation of renewable energy as defined by the International Renewable Energy Agency (IRENA) Statute³, including: <ul style="list-style-type: none"> • wind energy • solar energy • small-scale run-of-river hydro (under 25 Mega Watts)⁴ • bio-energy from waste biomass • tidal energy • geothermal energy (direct emissions of under 100 Grams CO₂/kilowatt) ii. transmission infrastructure and other supporting infrastructure wholly dedicated to renewable 	<ul style="list-style-type: none"> • Renewable energy capacity installed (MWh) • Avoided/reduced carbon emissions (metric tons CO₂)

¹ Manulife Sustainable Bond Framework dated February 2022 is available on their website at: https://www.manulife.com/content/dam/corporate/global/en/documents/pas/MFC_SBF_2022_EN.pdf

² Sustainalytics’ Second-Party Opinion on Manulife Sustainable Bond Framework is available at: https://www.manulife.com/content/dam/corporate/global/en/documents/pas/MFC_SB_SPO_2022_EN.pdf

³ IRENA Statute, 2009. [IRENA_FC_Statute_signed_in_Bonn_26_01_2009](#)

⁴ Selection criteria of hydropower plants includes an environmental and social impact assessment undertaken by a credible third party to demonstrate no significant risks or controversy surrounding the respective project.

	<p>energy generation facilities including inverters, transformers, energy storage systems and control systems</p> <p>iii. production or manufacturing facilities wholly dedicated to equipment, feedstock, or components for renewable energy generation facilities</p>	
Green Buildings	<p>Purchase, construction, operation, and maintenance of new or existing commercial or residential buildings that:</p> <p>i. have achieved, based on third-party assessment, greenhouse gas emission performance in the top 15% of their city, or</p> <p>ii. have received, or expect to receive based on its design, construction and operational plans, certification according to third party verified green building standards, such as:</p> <ul style="list-style-type: none"> • LEED Gold or Platinum standard • BOMA BEST/360 Gold or Platinum • Energy Star score of 85+ 	<ul style="list-style-type: none"> • Green building certifications and certified area (square footage) • Avoided/reduced carbon emissions (metric tons CO₂)
Environmentally Sustainable Management of Natural Resources & Land Use	<p>Purchase and operation of sustainably - managed timberland holdings certified by credible third-party forest certification systems, such as:</p> <p>i. Forest Stewardship Council (FSC)</p> <p>ii. Programme for the Endorsement of Forest Certification (PEFC)</p> <p>Purchase and operation of sustainably - managed farmland holdings certified by credible third-party forest certification systems, such as:</p> <p>i. Leading Harvest Standard</p>	<ul style="list-style-type: none"> • Sustainable forestry certification and certified area (square footage) • Removed/sequestered carbon emission (metric tons CO₂)
Energy Efficiency	<p>Development, construction, acquisition, installation, operation, and upgrades of projects that reduce energy consumption by at least 20%, including:</p> <p>i. projects involving the installation, maintenance or replacement of efficient heating, ventilation, air conditioning, refrigeration, lighting, and electrical equipment</p> <p>ii. projects that allow the monitoring and modeling of energy performance such as the design and installation of digital controls, sensors or building information systems</p> <p>iii. projects that optimize the amount and time of energy consumption by minimizing peak loads, such as design and installation of metering systems, smart grids, load control systems</p>	<ul style="list-style-type: none"> • Annual energy savings (MWh) • Avoided/reduced carbon emissions (metric tons CO₂)

Issuer’s Responsibility

Manulife is responsible for providing accurate information and documentation relating to the details of the funded projects, including description of projects, amounts allocated and project impact.

Independence and Quality Control

Sustainalytics, a leading provider of ESG research and ratings, conducted the verification of use of proceeds from Manulife’s 2022 Green Bond. The work undertaken as part of this engagement included collection of documentation from Manulife and review of said documentation to assess conformance with the Framework.

Sustainalytics relied on the information and the facts presented by Manulife. Sustainalytics is not responsible nor shall it be held liable for any inaccuracies in the opinions, findings or conclusions herein due to incorrect or incomplete data provided by Manulife.

Sustainalytics made all efforts to ensure the highest quality and rigor during its assessment process and enlisted its Sustainability Bonds Review Committee to provide oversight of the review.

Conclusion

Based on the limited assurance procedures conducted,⁵ nothing has come to Sustainalytics’ attention that causes us to believe that, in all material respects, the reviewed projects do not conform with the Use of Proceeds criteria and reporting commitments in the Framework. Manulife has disclosed to Sustainalytics that the proceeds from the 2022 Green Bond were fully allocated as of 31 December 2022.

Detailed Findings

Table 2: Detailed Findings

Eligibility Criteria	Procedure Performed	Factual Findings	Error or Exceptions Identified
Use of Proceeds Criteria	Verification of the projects funded with proceeds from the 2022 Green Bond to determine if projects aligned with the Use of Proceeds criteria outlined in the Framework and above in Table 1.	All projects reviewed complied with the use of proceeds criteria.	None
Reporting Criteria	Verification of the projects funded with proceeds from the 2022 Green Bond to determine if the impact of projects was reported in line with the KPIs outlined in the Manulife Sustainable Bond Framework and above in Table 1. For a list of KPIs that will be reported on, please refer to Appendix 1.	Manulife has confirmed that all projects reviewed will report on at least one KPI per use of proceeds category.	None

⁵ Sustainalytics limited assurance process includes reviewing the documentation relating to the details of the funded projects, including description of projects, estimated and realized costs of projects, and project impact, as provided by the Issuer, which is responsible for providing accurate information. Sustainalytics has not conducted on-site visits to projects.

Appendix

Appendix 1: Reported Allocation of Proceeds and Impact

Use of Proceeds Category	Sub Sector	Pro-rated Net Proceeds Allocated (USD million)	Reported Impact Indicators
Renewable Energy	Wind	167	<ul style="list-style-type: none"> 389,885 MWh installed capacity 46,996 metric tons of avoided CO₂e emissions
	Small-scale run-of-river hydro ⁶	66	<ul style="list-style-type: none"> N/A⁷
	Solar	117	<ul style="list-style-type: none"> 211,272 MWh installed capacity 82,212 metric tons of avoided CO₂e emissions
Environmentally Sustainable Management of Living Natural Resources & Land Use	Certified timber acreage	213	<ul style="list-style-type: none"> 183,705 acres of Sustainable Forestry Initiative certified forests -234,477 metric tons of CO₂ removed/sequestered.^{8,9}
Energy Efficiency	Energy retrofit ¹⁰	10	<ul style="list-style-type: none"> 2,912 MWh annual energy savings 3,352 metric tons of avoided CO₂ emissions
Green Buildings	US and CAD mortgages	173	<ul style="list-style-type: none"> 620,982 square feet of certified area Green Building Certifications acquired: LEED Gold (US), BOMA BEST Platinum (CAD)
Total Net Proceeds Allocated (USD million)		746.0	
Total Net Proceeds Raised (USD million)		746.0¹¹	

⁶ Sustainalytics notes that the funded hydro project has a capacity of 7.25 MW, which adheres to the eligibility criteria provided in the Framework.

⁷ Manulife has communicated to Sustainalytics that the financed hydro projects have not yet reached commercial operations as of 31 December 2022.

⁸ Manulife has communicated to Sustainalytics that carbon removals for sustainably managed forestry assets are expected to fluctuate due to ongoing forest management activities and, as such, the year-over-year change in profile may be positive or negative.

⁹ Manulife has communicated to Sustainalytics that the KPI data for carbon sequestration does not cover all financed assets. Complete information will be provided in the 2024 Green Bond Report.

¹⁰ Manulife has confirmed to Sustainalytics that assets financed under the Energy Efficiency category adhere to the Framework's criterion of a minimum 20% reduction in energy consumption.

¹¹ Manulife has communicated to Sustainalytics that it raised USD 750 million through the proceeds of the 2022 Green Bond.

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